

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 - 3. (canceled)

4. (previously presented) A lithium secondary battery, comprising:

an internal electrode body including a positive electrode, a negative electrode, and a separator, the positive electrode and the negative electrode being wound with the separator so that the positive electrode and the negative electrode are prevented by the separator from coming into direct contact with each other;

an organic electrolyte; and

at least a plurality of positive electrode tabs connected to the positive electrode and at least a plurality of negative electrode tabs connected to the negative electrode for current collecting, a thickness of a said tab being not more than twice a thickness of an electrode active material layer in an electrode to which the tabs are welded,

a total cross-sectional area of all of the positive electrode tabs connected to the positive electrode being not less than a constant area in accordance with the quality of the material to be used for the tabs, said tabs connected to the positive electrode being selected from among aluminum tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not less than 0.009 cm^2 , copper tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not less than 0.005 cm^2 and nickel tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not less than 0.004 cm^2 ;

a total cross-sectional area of all of the negative electrode tabs connected to the negative electrode being not less than a constant area in accordance with the quality of the material to be used for the tabs, said tabs connected to the negative electrode being selected from among aluminum tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not less than 0.009 cm^2 , copper tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not less than 0.005 cm^2 and nickel tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not less than 0.004 cm^2 .

5. (currently amended) The lithium secondary battery according to claim ~~14~~, wherein a sum of resistance value of the tabs per a unit battery is not more than 1 m Ω .

6. (previously presented) The lithium secondary battery according to claim 22, wherein a sum of resistance value of the tabs per a unit battery is not more than 1 m Ω .

7. (previously presented) A lithium secondary battery, comprising:
an internal electrode body including a positive electrode, a negative electrode, and a separator, the positive electrode and the negative electrode being wound or laminated with the separator so that the positive electrode and the negative electrode are prevented by the separator from coming into direct contact with each other;
an organic electrolyte; and
at least a plurality of tabs connected to each of the positive and negative electrodes for current collecting,
wherein the tabs function as current fuses to become nonconductive in the event that a condition arises during discharge of the battery in which sufficient current to damage one or more components of the battery is provided.

8. (previously presented) The lithium secondary battery according to claim 7, wherein said tabs connected to the positive electrode are selected from among aluminum tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not more than $0.36/R$ (cm²), R being internal resistance, in m Ω , of a unit battery, copper tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not more than $0.18/R$ cm², and nickel tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not more than $0.14/R$ cm² and wherein said tabs connected to the negative electrode are selected from among aluminum tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not more than $0.36/R$ (cm²), copper tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not more than $0.18/R$ cm², and nickel tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not more than $0.14/R$ cm².

9. (original) The lithium secondary battery according to claim 8, wherein the tabs are provided with a narrow portion.

10. (previously presented) The lithium secondary battery according to claim 4, wherein internal resistance is not more than $10\text{ m}\Omega$ per a unit battery.

11. (original) The lithium secondary battery according to claim 7, wherein internal resistance is not more than $10\text{ m}\Omega$ per a unit battery.

12. (previously presented) The lithium secondary battery according to claim 4, wherein said tabs connected to the positive electrode are selected from among aluminum tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not less than 0.009 cm^2 and not more than $0.36/R\text{ (cm}^2\text{)}$, R being internal resistance, in $\text{m}\Omega$, of a unit battery, copper tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not less than 0.005 cm^2 and not more than $0.18/R\text{ cm}^2$, and nickel tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not less than 0.004 cm^2 and not more than $0.14/R\text{ cm}^2$ and wherein said tabs connected to the negative electrode are selected from among aluminum tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not less than 0.008 cm^2 and not more than $0.36/R\text{ (cm}^2\text{)}$, copper tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not less than 0.005 cm^2 and not more than $0.18/R\text{ cm}^2$, and nickel tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not less than 0.004 cm^2 and not more than $0.14/R\text{ cm}^2$.

13. (previously presented) The lithium secondary battery according to claim 7, wherein said tabs connected to the positive electrode are selected from among aluminum tabs wherein a total cross-sectional area all of said tabs connected to the positive electrode is not less than 0.008 cm^2 and not more than $0.36/R\text{ (cm}^2\text{)}$, R being internal resistance, in $\text{m}\Omega$, of a unit battery, copper tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not less than 0.005 cm^2 and not more than $0.18/R\text{ cm}^2$, and nickel tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not less than 0.004 cm^2 and not more than $0.14/R\text{ cm}^2$ and wherein said tabs connected to

the negative electrode are selected from among aluminum tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not less than 0.008 cm^2 and not more than $0.36/R \text{ (cm}^2\text{)}$, copper tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not less than 0.005 cm^2 and not more than $0.18/R \text{ cm}^2$, and nickel tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not less than 0.004 cm^2 and not more than $0.14/R \text{ cm}^2$.

14. (previously presented) The lithium secondary battery according to claim 4, wherein deviation of respective resistance values of the tabs remains with $\pm 20\%$ of an average value.

15. (original) The lithium secondary battery according to claim 7, wherein deviation of respective resistance values of the tabs remains within $\pm 20\%$ of an average value.

16. (currently amended) The lithium secondary battery according to claim 4, wherein said battery further comprises a positive terminal and a negative terminal, and each said tab is:

connected at a first end to the positive electrode or the negative electrode, and at a second end to said positive terminal or said negative terminal by pressure attachment;

connected at a first end to the positive electrode or the negative electrode, and at a second end to said positive terminal or said ~~negative~~ negative terminal by welding; or

connected at a first end to the positive electrode or the negative electrode, and comprises at a second end an eyelet which is connected to said positive terminal or said negative terminal.

17. (previously presented) The lithium secondary battery according to claim 7, wherein said battery further comprises a positive terminal and a negative terminal, and each said tab is:

connected at a first end to the positive electrode or the negative electrode, and at a second end to said positive terminal or said negative terminal by pressure attachment;

connected at a first end to the positive electrode or the negative electrode, and at a second end to said positive terminal or said negative terminal by welding; or

connected at a first end to the positive electrode or the negative electrode, and comprises at a second end an eyelet which is connected to said positive terminal or said negative terminal.

18. (previously presented) The lithium secondary battery according to claim 4, wherein battery capacity is not less than 5 Ah.

19. (original) The lithium secondary battery according to claim 7, wherein battery capacity is not less than 5 Ah.

20. (previously presented) The lithium secondary battery according to claim 4, wherein the battery is used for an electric vehicle or a hybrid electric vehicle.

21. (original) The lithium secondary battery according to claim 7, wherein the battery is used for an electric vehicle or a hybrid electric vehicle.

22. (previously presented) The lithium secondary battery according to claim 4, wherein said tabs connected to the positive electrode are selected from among aluminum tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not less than 0.014 cm^2 , copper tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not less than 0.008 cm^2 and nickel tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not less than 0.008 cm^2 and wherein said tabs connected to the negative electrode are selected from among aluminum tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not less than 0.014 cm^2 , copper tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not less than 0.008 cm^2 , and nickel tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not less than 0.008 cm^2 .

23. (previously presented) The lithium secondary battery according to claim 4, wherein a thickness of a tab is not more than a thickness of an electrode active material layer in an electrode to which the tabs are welded.

24. (canceled)

25. (previously presented) The lithium secondary battery according to claim 7, wherein said tabs connected to the positive electrode are selected from among aluminum tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not more than $0.18/R$ (cm^2), R being internal resistance, in $\text{m}\Omega$, of a unit battery, copper tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not more than $0.09/R$ cm^2 , and nickel tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not more than $0.07/R$ cm^2 and wherein said tabs connected to the negative electrode are selected from among aluminum tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not more than $0.18/R$ (cm^2), copper tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not more than $0.09/R$ cm^2 , and nickel tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not more than $0.07/R$ cm^2 .

26. (previously presented) The lithium secondary battery according to claim 4, wherein said tabs connected to the positive electrode are selected from among aluminum tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not less than 0.014 cm^2 and not more than $0.18/R$ (cm^2), R being internal resistance, in $\text{m}\Omega$, of a unit battery, copper tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not less than 0.008 cm^2 and not more than $0.09/R$ cm^2 , and nickel tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not less than 0.008 cm^2 and not more than $0.07/R$ cm^2 and wherein said tabs connected to the negative electrode are selected from among aluminum tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not less than 0.014 cm^2 and not more than $0.18/R$ (cm^2), copper tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not less than 0.008 cm^2 and not more than $0.09/R$ cm^2 , and nickel tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not less than 0.008 cm^2 and not more than $0.07/R$ cm^2 .

27. (previously presented) The lithium secondary battery according to claim 7, wherein said tabs connected to the positive electrode are selected from among aluminum tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not less than 0.014 cm^2 and not more than $0.18/R \text{ (cm}^2\text{)}$, R being internal resistance, in $\text{m}\Omega$ of a unit battery, copper tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not less than 0.008 cm^2 and not more than $0.09/R \text{ cm}^2$, and nickel tabs wherein a total cross-sectional area of all of said tabs connected to the positive electrode is not less than 0.008 cm^2 and not more than $0.07/R \text{ cm}^2$ and wherein said tabs connected to the negative electrode are selected from among aluminum tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not less than 0.014 cm^2 and not more than $0.18/R \text{ (cm}^2\text{)}$, copper tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not less than 0.008 cm^2 and not more than $0.09/R \text{ cm}^2$, and nickel tabs wherein a total cross-sectional area of all of said tabs connected to the negative electrode is not less than 0.008 cm^2 and not more than $0.07/R \text{ cm}^2$.